



**DEPARTMENT OF DEFENSE**

**DEPARTMENT OF ENERGY**

**ENVIRONMENTAL PROTECTION AGENCY**

**NUCLEAR REGULATORY COMMISSION**

**[EPA-HQ-OAR-2021-0276; FRL-10023-12-OAR]**

**Multi-Agency Radiation Survey and Site Investigation Manual, Revision 2**

**AGENCY:** Department of Defense, Department of Energy, Environmental Protection Agency, and the Nuclear Regulatory Commission.

**ACTION:** Notice of availability with request for public comment.

**SUMMARY:** The Department of Defense (DoD), Department of Energy (DOE), Environmental Protection Agency (EPA) and the Nuclear Regulatory Commission (NRC) are announcing for public comment the availability of a draft revision document, entitled the “Multi-Agency Radiation Survey and Site Investigation Manual” (MARSSIM). MARSSIM provides information on planning, conducting, evaluating, and documenting environmental radiological surveys of surface soil and building surfaces for demonstrating compliance with regulations. MARSSIM, when finalized as Revision 2, will be a multi-agency consensus document. The agencies are seeking public comment in order to receive feedback from the widest range of interested parties and to ensure that all information relevant to developing the document is received. The agencies will review public comments received on the draft MARSSIM Revision 2 as well as comments from a concurrent, independent, scientific peer review. The Agencies will review comments received during the public comment period and make revisions to the document as appropriate.

**DATES:** Comments must be received on or before **[INSERT DATE 90 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**.

**ADDRESSES:** Submit your comments, identified by Docket ID No. **EPA-HQ-OAR-2021-0276**, to the *Federal eRulemaking Portal*: <http://www.regulations.gov>. Follow the online

instructions for submitting comments. Once submitted, comments cannot be edited or withdrawn. The EPA may publish any comment received to its public docket. Do not electronically submit any information you consider to be Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Multimedia submissions (audio, video, etc.) must be accompanied by a written comment. The written comment is considered the official comment and should include discussion of all points you wish to make. The EPA will generally not consider comments or comment contents located outside of the primary submission (i.e., on the web, cloud or other file sharing system). For additional submission methods, the full EPA public comment policy, information about CBI or multimedia submissions, and general guidance on making effective comments, please visit:

<http://www2.epa.gov/dockets/commenting-epa-dockets>.

You may obtain publicly-available information related to this action, including copies of the MARSSIM Revision 2, by any of the following methods:

NRC's Agencywide Documents Access Management System (ADAMS): You may obtain publicly-available documents online in the ADAMS Public Documents collection at <https://www.nrc.gov/reading-rm/adams.html>. To begin the search, select "Begin Web-based ADAMS Search." Please refer to ML21008A572 when contacting the NRC about the availability of the MARSSIM Rev. 2 draft. For problems with ADAMS, please contact the NRC's Public Document Room (PDR) reference staff at 1-800-397-4209, 301-415-4737, or by email to [pdr.resource@nrc.gov](mailto:pdr.resource@nrc.gov). Attention: The PDR, where you may have previously examined and ordered copies of public documents is currently closed for in-person document review.

You may submit your request to the PDR via email at [pdr.resource@nrc.gov](mailto:pdr.resource@nrc.gov) or call 1-800-397-4209 between 8:00 a.m. and 4:00 p.m. (EST), Monday through Friday, except Federal holidays. The DOE, EPA, and NRC each have a publication number for MARSSIM. They are: for the DOE, DOE/AU-0002; for the EPA, EPA 402-P-20-001; for the NRC, NUREG-1575, Rev. 2. A free single copy of the draft MARSSIM Revision 2 may be requested by e-mail to

DISTRIBUTION.Resource@nrc.gov.

The MARSSIM Revision 2 document is also available for download at:

<https://www.epa.gov/radiation/multi-agency-radiation-survey-and-site-investigation-manual-marssim>.

*Instructions:* All submissions received must include the Docket ID No. **EPA-HQ-OAR-2021-0276** for this rulemaking. Comments received may be posted without change to

<https://www.regulations.gov/>, including any personal information provided. For detailed instructions and additional information on submitting comments, see the **SUPPLEMENTARY INFORMATION** section of this document.

**FOR FURTHER INFORMATION CONTACT:** Any of the following points of contact for each agency for technical information (See “Addresses” section above for directions on obtaining a copy of the draft MARSSIM Revision 2.): DoD: Erik Abkemeier, Phone: (757) 887-7635, [erik.j.abkemeier@navy.mil](mailto:erik.j.abkemeier@navy.mil), U.S. Navy, NAVSEADET RASO, 160 Main Road, Yorktown, VA 23691-5105; DOE: Derek Favret (AU-22), Phone: (202) 586-0250, [derek.favret@hq.doe.gov](mailto:derek.favret@hq.doe.gov), or Amanda Anderson (EM-3.11), Phone: (240) 702-5556, [amanda.anderson@em.doe.gov](mailto:amanda.anderson@em.doe.gov), U.S. Department of Energy, 1000 Independence Avenue, SW, Washington, DC 20585; EPA: Kathryn Snead; Phone: (202) 343-9228, [snead.kathryn@epa.gov](mailto:snead.kathryn@epa.gov), U.S. Environmental Protection Agency, Mail Stop 6608T, 1200 Pennsylvania Avenue, N.W., Washington DC 20460-1000; NRC: Mark Fuhrmann, Phone: (301) 415-0879, [mark.fuhrmann@nrc.gov](mailto:mark.fuhrmann@nrc.gov), U.S. Nuclear Regulatory Commission, Mail Stop TWF 10 A-12 11555 Rockville Pike, Rockville, MD 20852-2738. Questions concerning the multi-agency document development project should be addressed to Kathryn Snead, U.S. Environmental Protection Agency, 1200 Pennsylvania Ave., NW MC 6608T, Washington, DC 20460, (202) 343-9228, [snead.kathryn@epa.gov](mailto:snead.kathryn@epa.gov).

## **SUPPLEMENTARY INFORMATION:**

### **I. General Information**

*A. What Should I Consider as I Prepare My Comments for EPA?*

1. *Submitting Confidential Business Information (CBI).* The EPA may publish any comment received to its public docket. Do not submit CBI information to the EPA through [www.regulations.gov](http://www.regulations.gov) or e-mail. Clearly mark the part or all of the information that you claim to be CBI. For CBI information in a disk or CD ROM that you mail to the EPA, mark the outside of the disk or CD ROM as CBI and then identify electronically within the files on the disk or CD ROM the specific information that is claimed as CBI. In addition to one complete version of the comment that includes information claimed as CBI, a copy of the comment that does not contain the information claimed as CBI must be submitted for inclusion in the public docket. Information so marked will not be disclosed except in accordance with procedures set forth in 40 CFR part 2.

2. *Tips for Preparing Your Comments.* When submitting comments, remember to:

- Identify the rulemaking by docket number **EPA-HQ-OAR-2021-0276** and other identifying information (subject heading, Federal Register date and page number).
- Follow directions: The Agency may ask you to respond to specific questions or organize comments by referencing a Code of Federal Regulations (CFR) part or section number.
- Explain why you agree or disagree; suggest alternatives and substitute language for your requested changes.
- Describe any assumptions and provide any technical information and/or data that you used.
- If you estimate potential costs or burdens, explain how you arrived at your estimate in sufficient detail to allow for it to be reproduced.
- Provide specific examples to illustrate your concerns and suggest alternatives.
- Explain your views as clearly as possible, avoiding the use of profanity or personal threats.
- Make sure to submit your comments by the comment period deadline identified.

## **II. Background**

MARSSIM provides information on planning, conducting, evaluating, and documenting environmental radiological surveys of surface soil and building surfaces for demonstrating compliance with regulations. MARSSIM, when finalized as Revision 2, will update this multi-agency consensus document.

MARSSIM was originally developed by the technical staffs of the four Federal agencies having authority for control of radioactive materials: DoD, DOE, EPA and NRC (60 FR 12555; March 7, 1995). The four agencies issued Revision 1 to MARSSIM in August 2000, and additional edits to Revision 1 in June 2001. MARSSIM has not been updated since 2001; updates prior to 2001 primarily consisted of minor non-technical edits. Revision 2 updates the science, clarifies methods, and implements lessons learned from over 20 years of the document's use in industry.

A summary of changes in MARSSIM Revision 2 includes the following: (1) added measurement quality objectives (MQOs) and measurement uncertainty, (2) expanded measurement methods to include scan-only surveys, (3) updated survey instrumentation information, (4) added Scenario B ("assumed to meet the criteria until proven otherwise"), (5) increased emphasis on regulator interface during survey design, (6) improved description of the lower bound of the gray region (LBGR), (7) updated references, (8) changed English units to International System of Units (SI), (9) avoided using the term "Area Factor," (10) included additional examples in Chapter 5 and (11) reorganized Chapter 4.

The public review is a necessary step in the development of a final multi-agency consensus document. The document will also undergo concurrent, independent, scientific peer review. The draft has not been approved by the participating agencies for use, in part or in whole, and should not be used, cited, or quoted, except for the purposes of providing comments as requested.

Commenters are requested to focus on technical accuracy and understandability.

Commenters are also requested to address five questions while reviewing MARSSIM Revision 2:

- (1) Do the revisions to MARSSIM provide greater clarity while maintaining a practical and implementable approach to performing environmental radiological surveys of surface soil and building surfaces?
- (2) Are the revisions to MARSSIM technically accurate?
- (3) Does MARSSIM Revision 2 provide useful examples and descriptions of approaches to implementing surveys and the statistics by which they are interpreted?
- (4) Is the information in MARSSIM Revision 2 understandable and presented in a logical sequence? How can the presentation of material be modified to improve the understandability of the manual?

Comments may be submitted as proposed modified text, or as a discussion. Comments should be accompanied by supporting bases, rationale, or data. To ensure efficient and complete comment resolution, commenters are requested to reference the page number and the line number of MARSSIM Revision 2 to which the comment applies. Enter only the beginning page and line number, even if your comment applies to several pages or lines to follow.

Comments corresponding to an entire chapter, an entire section, or an entire table should be referenced to the line number for the title of the chapter section, or table. Comments on footnotes should be referenced to the line in the main text where the footnote is indicated. Comments on figures should be referenced to the page on which the figure appears. Figures do not have line numbers. The figure number should be included in the text of the comment. Comments on the entire manual should be referenced to the title page.

Title: Draft Multi-Agency Radiation Survey and Site Investigation Manual, Revision 2.

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